(12) INTERNATIONAL APPLÀ

ON PUBLISHED UNDER THE PATENT COOPL

HON TREATY (PCT)



(19) World Intellectual Property Organization
International Bureau



| 1000 1014 | 11 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000

(43) International Publication Date 31 July 2003 (31.07.2003)

PCT

(10) International Publication Number WO 03/061802 A1

- (51) International Patent Classification7: B01D 3/00, 3/14
- (21) International Application Number: PCT/NL03/00046
- (22) International Filing Date: 22 January 2003 (22.01.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 02075326.5

25 January 2002 (25.01.2002) E

(71) Applicant (for all designated States except US): TECHNISCHE UNIVERSITEIT DELFT [NL/NL]; Julianalaan 134, NL-2628 BL Delft (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DE GRAAUW, Johannes [NL/NL]; Meervalsloot 18, NL-2724 BK Zoetermeer (NL). STEENBAKKER, Maarten, Jan [NL/NL]; Willem Schürmannstraat 5 A, NL-3031 RM Rotterdam (NL). DE RIJKE, Arie [NL/NL]; Kortenaerstraat 4, NL-2676 VG Maasdijk (NL). OLUJIC, Zarko [NL/NL]; Nobellaan 56, NL-2641 XV Pijnacker (NL). JANSENS, Pieter, Johannes [NL/NL]; Planciusdreef 65, NL-2661 RK Bergschenhoek (NL).

- (74) Agent: PRINS, A., W.; Nieuwe Parklaan 97, NL-2587 BN Den Haag (NL).
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



(54) Title: HEAT INTEGRATED DISTILLATION COLUMN

(57) Abstract: The invention is directed to a heat integrated distillation column comprising a cylindrical shell having an upper and a lower end and at least one first inner volume and at least one second inner volume in the shell, and being in heat exchanging contact with each other through a wall separating the volumes, the improvement comprising providing means having heat exchanging capacity extending through the said wall from said at least one first volume into said at least one second volume, whereby the inside of the said heat exchanging means is in open connection with the said first volume.